

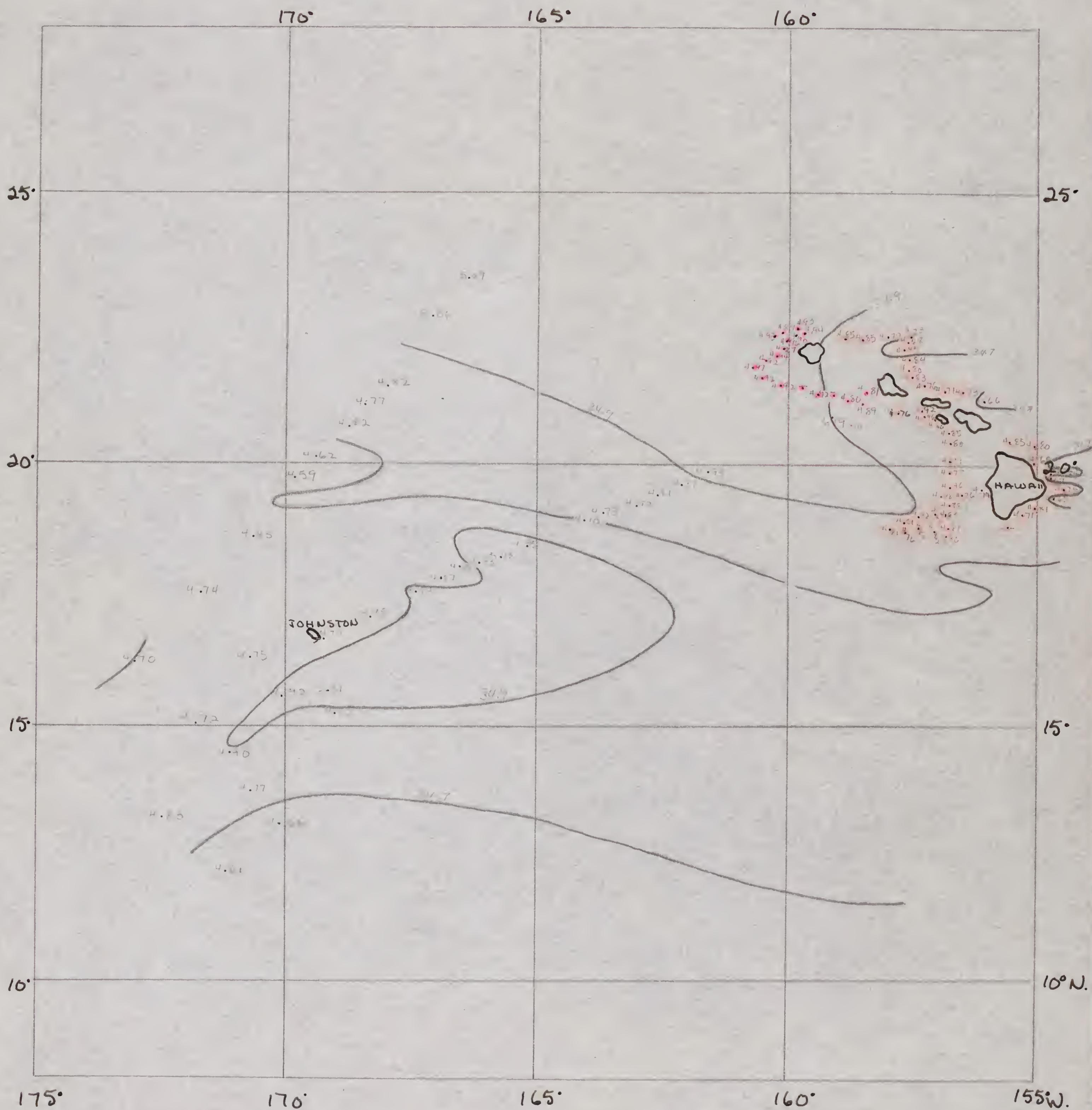
SMITHSONIAN CRUISE #89 - JUNE BT STATIONS  
6-5-64 to 6-17-64

6-24-64 to 6-30-64  
7-1-64 to 7-3-64

CBT

SMITHSONIAN CRUISE #89-JUNE  
6-5-64 to 6-17-64

SURFACE SALINITY %.

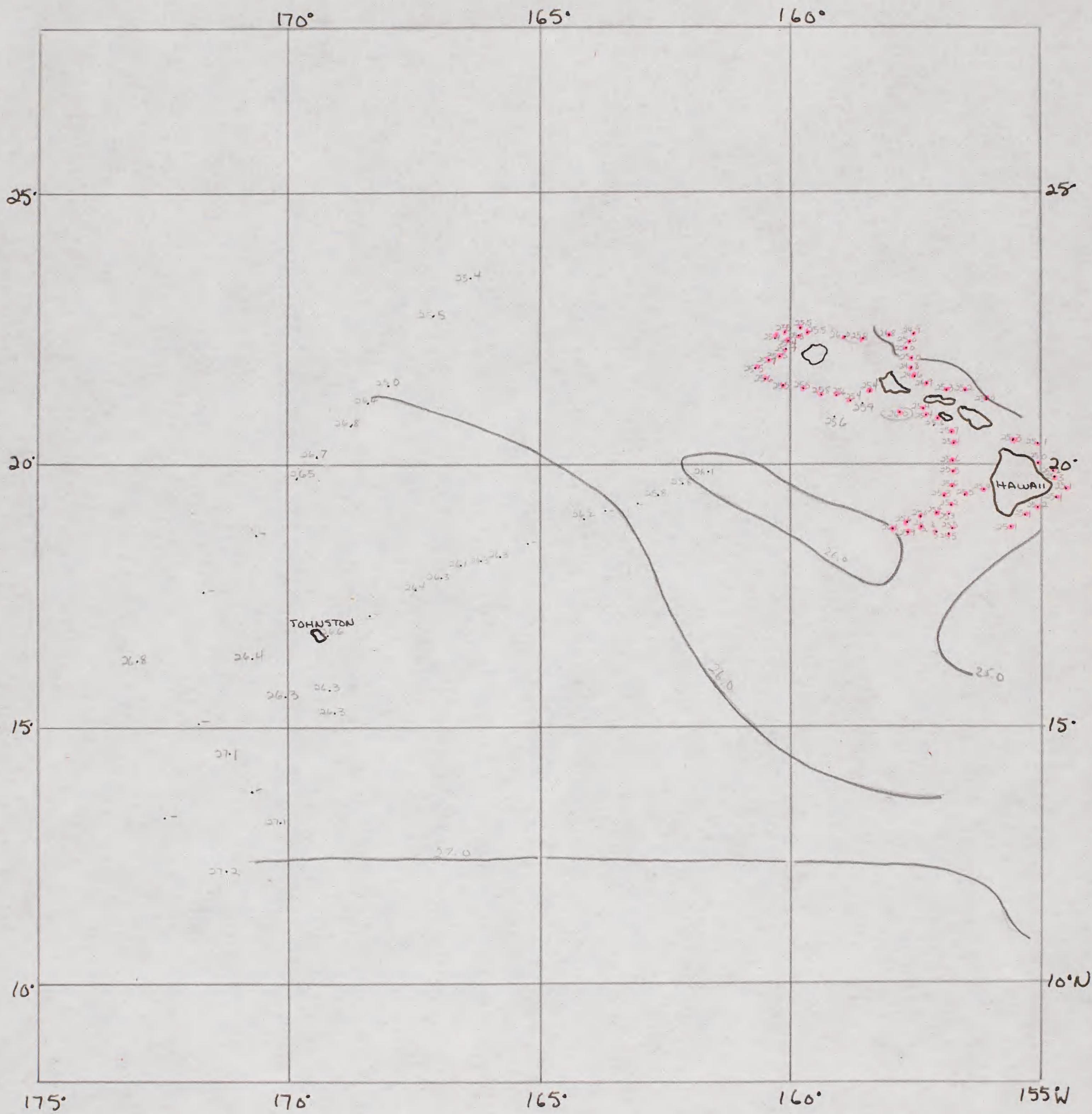


• GILBERT CRUISE #74  
THIS SECTION:  
6-24-64 to 6-30-64  
7-1-64 to 7-3-64

SURFACE  
SALINITY %.

SMITHSONIAN CRUISE #89-JUNE  
6-5-64 to 6-17-64

CORRECTED  
SURFACE TEMP. °C.



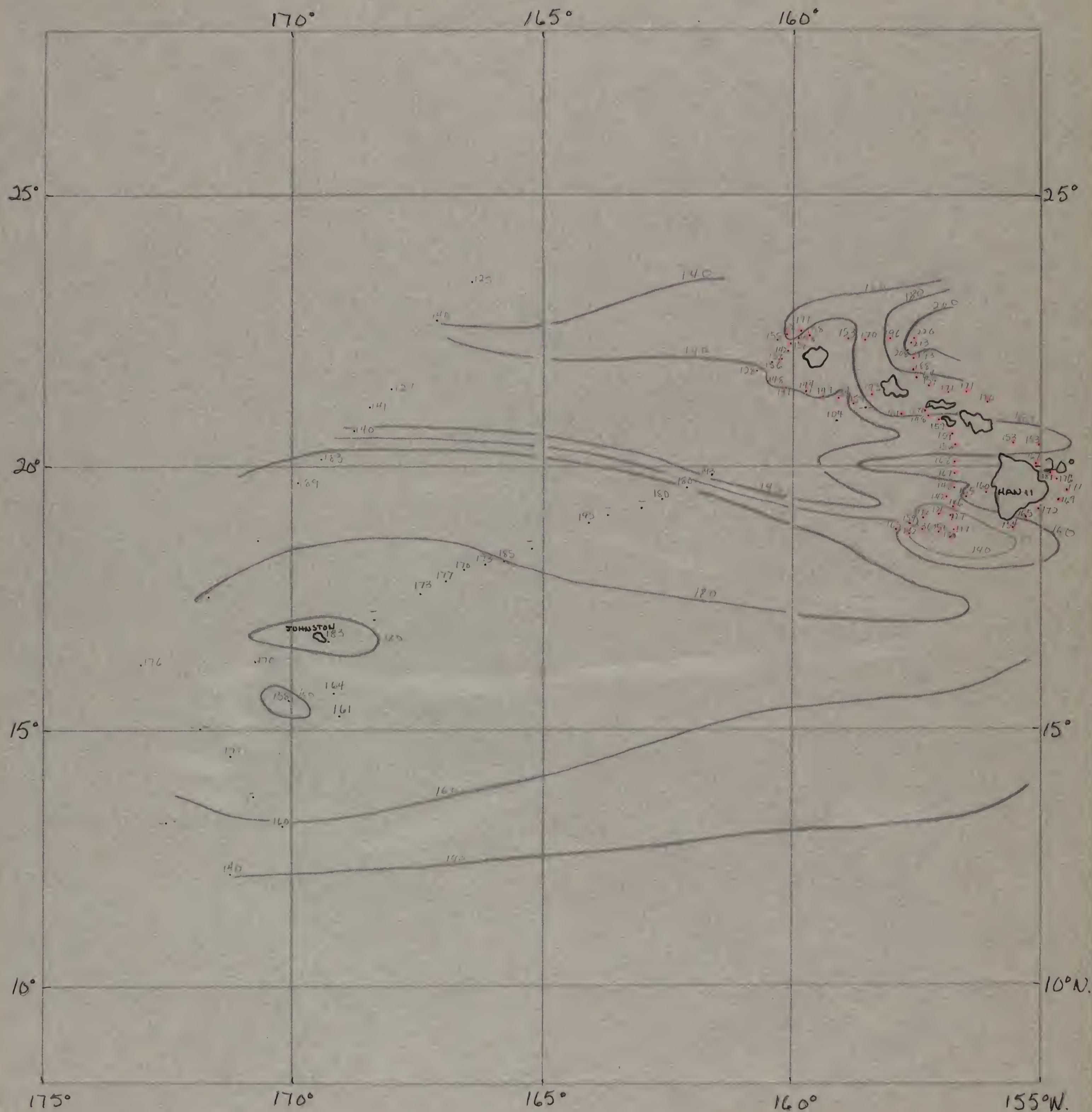
GILBERT CRUISE #74  
THIS SECTION!

6-24-64 to 6-30-64  
7-1-64 to 7-3-64

CORRECTED  
SURFACE TEMP. °C.

SMITHSONIAN CRUISE - 89-JUNE  
6-5-64 to 6-17-64

20° ISOTHERM  
DEPTH IN METERS  
BTs 1-18



GILBERT CRUISE #74  
THIS SECTION

6-24-64 to 6-30-64  
7-1-64 to 7-3-64

20° ISOTHERM  
DEPTH IN METERS

CBT

SMITHSONIAN CRUISE #89 - JUNE  
6-5-64 to 6-17-64

# DEPTH OF THE MIXED LAYER - METERS

GILBERT CRUISE '74  
THIS SECTION!

$$\begin{array}{r} 6-24-64 \text{ to } 6-30-64 \\ 7-1-64 \text{ to } 7-3-64 \end{array}$$

# DEPTH OF MIXED LAYERS - METERS

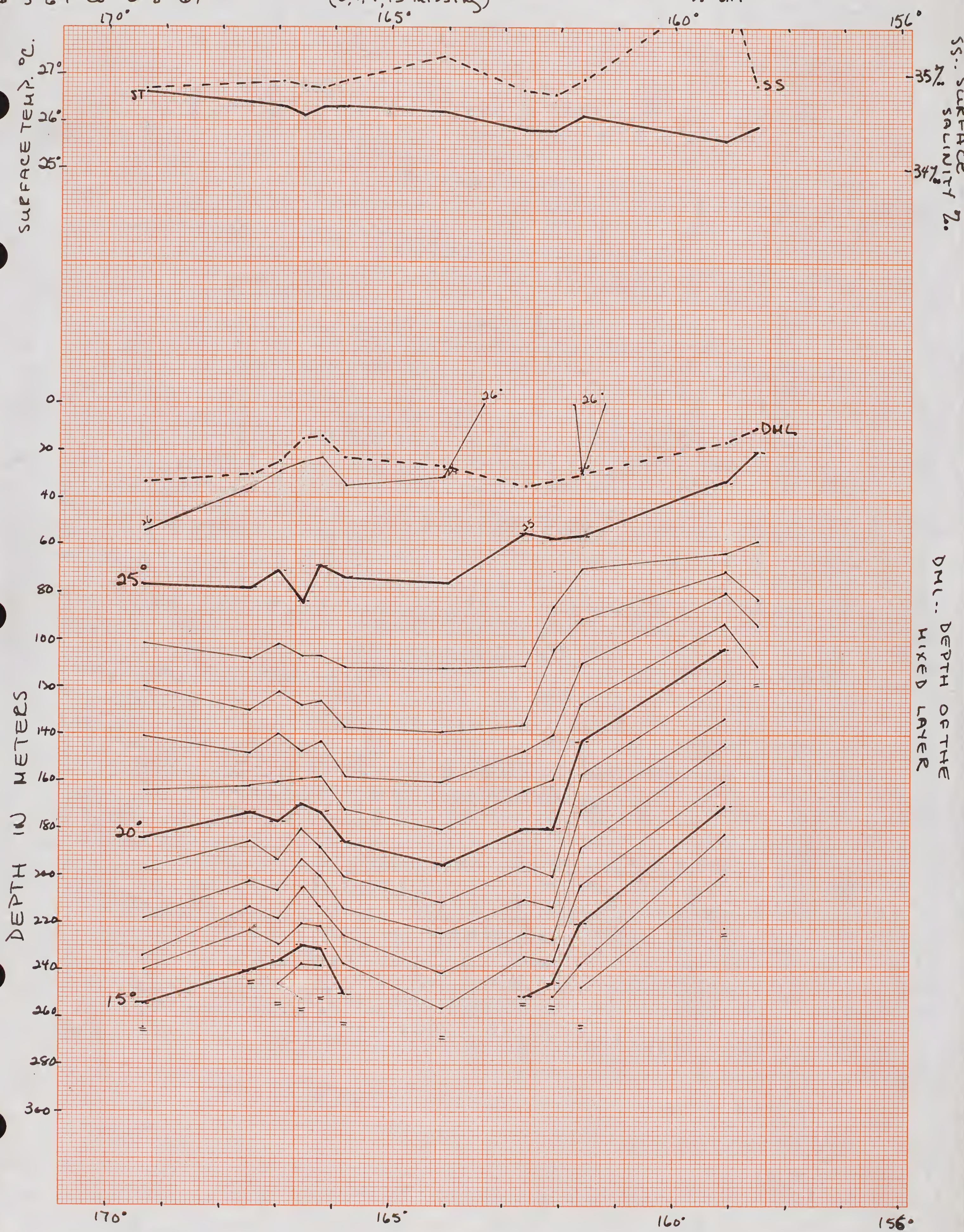
SMITHSONIAN CRUISE #89, JUNE  
JUNE 5, '64 to JUNE 17, '64  
170° 165°

BUCKET TEMP. °C  
BUCKET SALINITY %.  
16.0°

SMITHSONIAN CR. - JUNE #89 BT SECTION(1-16) 18° N. LAT. (AVERAGE)  
6-5-64 to 6-8-64 (6,7,9,15 missing) 35-6-19

EUGENE DIETZGEN CO.  
MADE IN U. S. A.

NO. 340R-M DIETZGEN GRAPH PAPER  
MILLIMETER

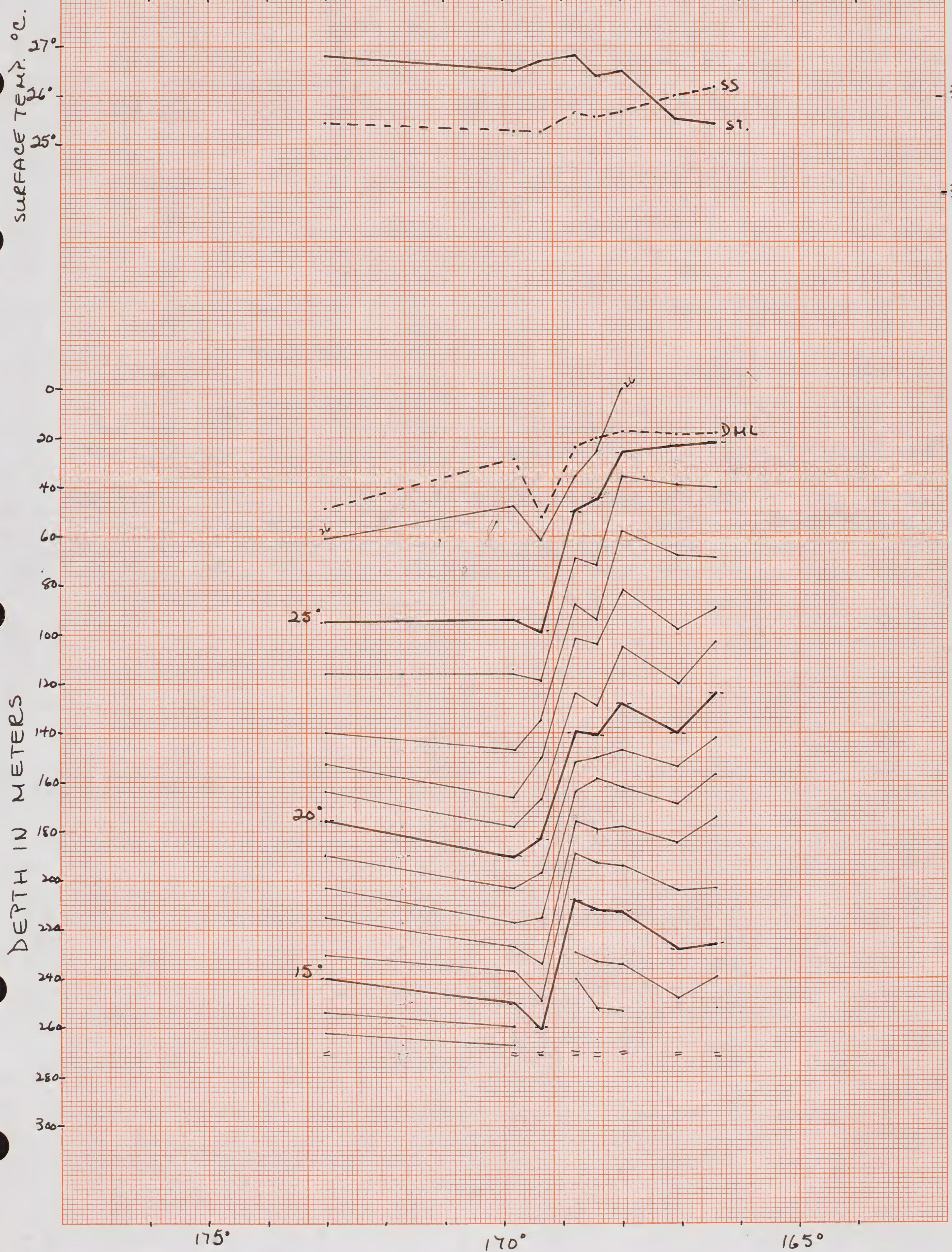


CST

SMITHSONIAN CR. JUNE '89  
6-14-64 to 6-17-64  
175°

BT SECTION (82-92)  
(84, 85 NO GOOD)

20° N. LAT. (AUER.)



## B T STATION DATA      S.O.S.      June Cruise

Sta. #	Local Time	Time Day	Time Mo.	Year	Lat. N	Long. W	Salinity	Temp. °C.
1	1800	5	VI	64	21° 03'	158° 32'		26.1
2	2100	5	VI	64	20 54	159 06		25.5
3	1200	6	VI	64	19 52	161 38		26.2
4	1500	6	VI	64	19 37	162 07		26.1
5	1800	6	VI	64	19 24	162 37		26.0
6	2100	6	VI	64	19 17	163 01		25.85
7	2400	6	VI	64	19 03	163 38		25.7
8	0300	7	VI	64	18 55	164 04		26.0
9	0900	7	VI	64	18 29	165 16		26.1
10	1200	7	VI	64	18 15	165 48		26.4
11	1500	7	VI	64	18 10	166 13		26.6
12	1800	7	VI	64	18 03	166 33		26.0
13	2100	7	VI	64	17 51	166 58		26.2
14	0000	8	VI	64	17 36	167 27		26.2
15	0600	8	VI	64	17 08	168 22		25.9
16	1200	8	VI	64	16 42	169 20		26.9
17	1800	8	VI	64	15 45	169 13		26.2
18	2100	8	VI	64	15 21	169 05		25.9
23	1300	9	VI	64	13 12	170 10		27.3
26	2200	9	VI	64	12 10	171 15		27.2
34	1400	10	VI	64	13 45	170 46		27.3
44	0800	11	VI	64	15 35	170 02		26.55
48	1700	11	VI	64	14 31	171 12		27.1
54	0300	12	VI	64	13 16	172 29		27.1
62	1900	12	VI	64	15 02	171 49		27.0
68	0800	13	VI	64	16 20	170 43		26.8
82	2300	14	VI	64	16 17	173 01		26.5
84	1200	15	VI	64	17 33	171 43		26.9
85	2100	15	VI	64	18 38	170 42		26.7
86	0600	16	VI	64	19 43	169 50		26.5
87	0900	16	VI	64	20 07	169 22		26.6
88	1500	16	VI	64	20 45	168 47		26.9
89	1800	16	VI	64	21 08	168 26		26.4
90	2100	16	VI	64	21 28	168 00		26.0
91	0600	17	VI	64	22 42	167 04		25.5
92	1200	17	VI	64	23 24	166 25		25.6

## BT 62347 - BAD PRESSURE ELEMENT

S.O.S JUNE 89

STATION No.	SLIDE No.	Surf. BT	Temp. Bkt	Diff.	Correction	Corrected Surf.T.			
1	1	26.3	26.1	.2	+ .4	25.9			
2	2	.0	25.5	.5		.6			
3	3	.5	26.2	.3		26.1			
4	4	.2	.1	.1		25.8			
5	5	.2	.0	.2		.8			
✓ 6	6	-	-	-		-			
✓ 7	7	-	-	-		-			
✓ 8	8	26.6	26.0	.6		26.2			
✓ 9	9	-	-	-		-			
10	10	26.7	26.4	.3		26.3			
11	11	.7	.6	.1		.3			
12	12	.5	.0	.5		.1			
13	13	.7	.2	.5		.3			
14	14	.8	.2	.6		.4			
✓ 15	15	-	-	-		-			
16	16	27.0	26.9	.1		26.6			
17	17	26.7	.2	.5		.3			
18	18	.7	25.9	.8		.3			
23	19	27.5	27.3	.2		27.1			
26	20	.6	.2	.4		.2			
*44	*22	26.7	26.6	.1		26.3			
48	23	27.5	27.1	.4		27.1			
✓ 54	24	-	-	-		-			
✓ 62	25	-	-	-		-			
68	26	27.2	26.8	.2		26.4			
82	27	.2	.5	.7		.8			
- 84	28	-	-	-		-			
✓ 85	29	-	-	-		-			
86	30	26.8	26.5	.3	+ .3	26.5			
87	31	27.0	.6	.4		.7			
88	32	.1	.9	.2		.8			
89	33	26.7	.4	.3		.4			
90	34	.3	.0	.3		.0			
91	35	25.8	25.5	.3		25.5			
92	36	.7	.6	.1		.4			
✓ 34	*21	-	-	-		-			

✓ Surface trace bad, or very bad trace.

BT # 62347 - Pressure element bad.

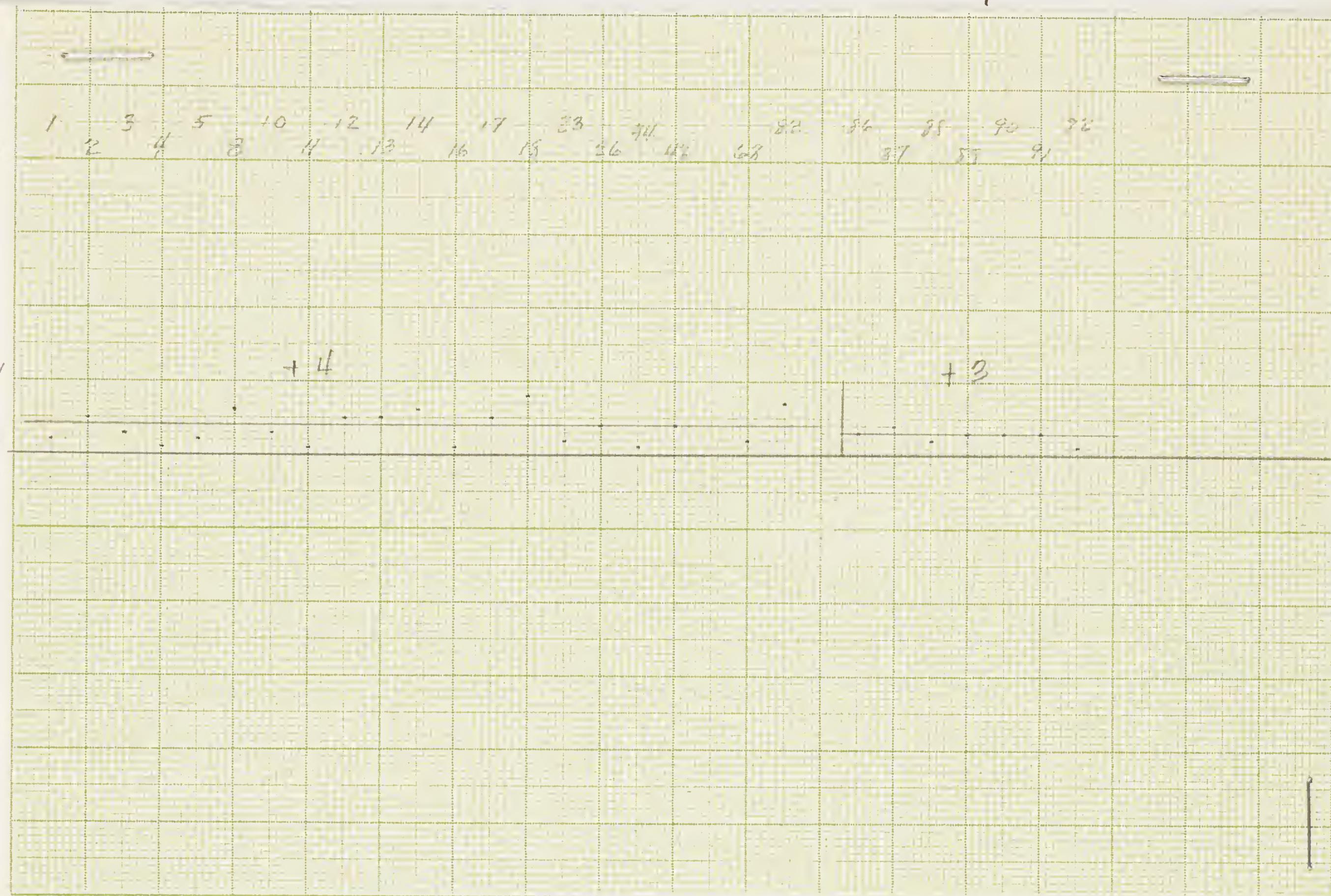
B T STATION DATA      S.O.S.      June Cruise - #89

<u>Sta. #</u>	<u>Local Time</u>	<u>Time</u>	<u>Day</u>	<u>Mo.</u>	<u>Year</u>	<u>Lat. N</u>	<u>Long. W</u>	<u>Salinity</u>	<u>Temp. °C.</u>
1	1800	5	VI	64		21° 03'			26.1
2	2100	5	VI	64		20 54			25.5
3	1200	6	VI	64		19 52			26.2
4	1500	6	VI	64		19 37			26.1
5	1800	6	VI	64		19 24			26.0
* 6	2100	6	VI	64		19 17			25.85
* 7	2400	6	VI	64		19 03			25.7
8	0300	7	VI	64		18 55			26.0
* 9	0900	7	VI	64		18 29			26.1
10	1200	7	VI	64		18 15			26.4
11	1500	7	VI	64		18 10			26.6
12	1800	7	VI	64		18 03			26.0
13	2100	7	VI	64		17 51			26.2
14	0000	8	VI	64		17 36			26.2
* 15	0600	8	VI	64		17 08			25.9
16	1200	8	VI	64		16 42			26.9
17	1800	8	VI	64		15 45			26.2
18	2100	8	VI	64		15 21			25.9
23	1300	9	VI	64		13 12			27.3
26	2200	9	VI	64		12 10			27.2
* 34	1400	10	VI	64		13 45			27.3
44	0800	11	VI	64		15 35			26.55
48	1700	11	VI	64		14 31			27.1
* 54	0300	12	VI	64		13 16			27.1
* 62*	1900	12	VI	64		15 02			27.0
68	0800	13	VI	64		16 20			26.8
82	2300	14	VI	64		16 17			26.5
* 84	1200	15	VI	64		17 33			26.9
* 85	2100	15	VI	64		18 38			26.7
86	0600	16	VI	64		19 43			26.5
87	0900	16	VI	64		20 07			26.6
88	1500	16	VI	64		20 45			26.9
89	1800	16	VI	64		21 08			26.4
90	2100	16	VI	64		21 28			26.0
91	0600	17	VI	64		22 42			25.5
92	1200	17	VI	64		23 24			25.6

\* - These traces no good.

\* - This data point is not recorded in the raw data BT.

# 89



	(89)	1	1800	5	VI	1964	21° 03'	158° 32'	1	34.888	26.1	1	+10 time
	BT 623#7A	2	2100				20° 54'	159° 06'		36.191	25.5	2	
	Guad	3	1200	6	VI	1964	19° 52'	161° 38'		34.932	26.2	3	
		4	1500				19° 37'	162° 07'		34.772	26.1	4	
		5	1800				19° 24'	162° 37'		34.814	26.0	5	

Smithsonian cruises hydrographic data

Cruise number	Station number	LZT	Time and date	Lat.	N-S	Long.	E-W	Depth in m	Salinity o/oo	Water temp °C	BT station number
			day month year								
89	6	2100	6 VI 1964	19° 17'	N	163° 01'	W	1	34.767	25.8	6 +10 time
	7	2400		19° 03'		163° 38'			34.732	25.7	7
	8	0300	7 VI 1964	18° 55'		164° 04'			34.698	26.0	8
	9	0900		18° 29'		165° 16'			34.954	26.1	9 +11 time
	10	1200		18° 15'		165° 48'			35.185	26.4	10
	11	1500		18° 10'		166° 13'			34.932	26.6	11
	12	1800		18° 03'		166° 33'			34.854	26.0	12
	13	2100		17° 51'		166° 58'			34.873	26.2	13
	14	0000	8 VI 1964	17° 36'		167° 27'			34.919	26.2	14
	15	0600		17° 08'		168° 22'			34.782	25.9	15
	16	1200		16° 42'		169° 20'			34.792	26.9	16
	17	1800		15° 45'		169° 13'			35.312	26.2	17
	18	2100		15° 21'		169° 05'			34.819	25.9	18
	19	0700	9 VI 1964	13° 58'		169° 24'			34.754	26.2	--
	23	1300		13° 12'		170° 10'			34.660	27.3	19
	27	2200		12° 10'		171° 15'			34.609	27.2	20
	32	0700	10 VI 1964	13° 10'		171° 25'			34.826	27.0	--
								7	34.966	27.2	
								11	35.062	27.0	
								24	35.033	27.0	
								110	36.205	24.0	
	34	1400		13° 45'		170° 46'		1	34.774	27.3	21
	43	0630	11 VI 1964	15° 31'		169° 55'			35.328	26.4	--
								9	35.610	26.2	
								12	35.668	26.2	
								26	35.504	26.2	
								117	35.110	24.1	
	44	0800		15° 35'		170° 12'		1	34.924	26.6	22
	48	1700		14° 31'		171° 12'			34.901	27.1	23
	54	0300	12 VI 1964	13° 16'		172° 29'			34.828	27.1	24
	56	0630		13° 41'		172° 57'			34.671	26.9	--
	62	1900		15° 02'		171° 49'			34.720	27.0	25
	67	0630	13 VI 1964	16° 15'		170° 37'			34.913	26.5	--

Smithsonian cruises hydrographic data

Cruise number	Station number	Time and date				Lat.	N-S	Long.	E-W	Depth in m	Salinity o/oo	Water temp °C	BT station number	
		LZT	day	month	year									
89	67	0630	13	VI	1964	16° 15'	N	170° 37'	W	8	34.932	26.5	--	
										11	35.024	26.4		
										25	35.126	26.4		
										115	35.215	24.5		
68	0800					16° 20'		170° 43'		1	34.748	26.8	26	
77	0630	14	VI	1964		14° 29'		173° 44'			34.786	26.7	--	
										7	34.842	26.8		
										10	34.915	26.9		
										24	34.977	26.9		
82	2300			VI	1964	16° 17'		173° 01'		111	35.258	25.2		
										1	34.697	26.5	27	
						17° 01'		172° 14'			34.915	26.7	--	
										9	35.014	26.6		
83	0630	15	VI	1964		16° 17'		173° 01'			13	35.122	26.9	
										26	35.342	26.8		
										120	35.830	24.5		
										1	34.740	26.9	28	
84	1200					17° 33'		171° 43'			34.830	26.6	29	
85	2100					18° 38'		170° 42'			34.590	26.5	30	
86	0600	16	VI	1964		19° 43'		169° 50'			34.618	26.6	31	
87	0900					20° 07'		169° 22'			34.818	26.9	32	
88	1500					20° 45'		168° 47'			34.770	26.4	33	
89	1800					21° 08'		168° 26'			34.820	26.0	34	
90	2100					21° 28'		168° 00'			35.002	25.5	35	
91	0600	17	VI	1964		22° 42'		167° 04'			35.094	25.6	36	
92	1200					23° 24'		166° 25'						